

- Calyx densely pubescent to middle or above on all the ribs; Newfoundland and Labrador to Virginia.....4a. *L. nashii trichogonum* Blake.
 Calyx 4.3–5.5 mm. long, its lobes 0.4–0.8 mm. long.
 Calyx lobes obtuse to subacute; hairs of calyx ca. 0.5–0.6 mm. long; branchlets loosely flowered; Florida.
 5. *L. obtusilobum* Blake.
 Calyx lobes acute or acutish; hairs of calyx ca. 0.2–0.3 mm. long; branchlets densely flowered; California, Nevada.....6. *L. californicum* (Boiss.) Heller.
 Calyx limb spreading at maturity; Texas, New Mexico.
 7. *L. limbatum* Small.
 BUREAU OF PLANT INDUSTRY, Washington, D. C.

REPORTS ON THE FLORA OF THE BOSTON DISTRICT,—XL.

SOLANACEAE.

DATURA.

D. INERMIS Jacq. Malden, introduced (*F. S. Collins*, Aug. 10, 1881); rubbish heap, Cambridge (*W. Deane*, Sept. 23, Oct. 2, 1884). Adventive from Africa.

D. METEL L. In shingle at Phillips Beach, Swampscott (*C. W. Swan*, 1888). Specimen in herb. N. E. Botanical Club.

D. METELOIDES DC. Rubbish heap, Cambridge (*W. Deane*, Sept. 17–18, Oct. 14, 1885). Specimen in herb. W. Deane.

D. STRAMONIUM L. Waste places; occasional, especially in Boston and along the coast.

D. TATULA L. Waste places, same range as *D. Stramonium*.

HYOSCYAMUS.

H. NIGER L. A rare weed at Ipswich, Westford, Somerville, Cambridge and Boston; other reports without specimens cited in *J. Robinson*, Fl. Essex Co. 86, 1880.

LYCIUM.

L. CHINENSE Mill. Boston (*S. S. Clark*, Nov. 10, 1915). Specimen in herb. Gray. Native of China.

L. HALIMIFOLIUM Mill. Persistent and escaping in many places.

LYCOPERSICUM.

L. ESCULENTUM Mill. Old gardens and waste places, seldom appearing for more than one year and hardly a part of the flora.

NICANDRA.

N. physalodes (L.) Pers. Waste places, occasional.

NICOTIANA.

N. bigelovii Wats. Woolwaste, N. Chelmsford (*W. P. Alcott*, July 1, 1879); also Lowell (*C. W. Swan*) according to Dame & Collins, Fl. Middlesex Co. 80, 1888.

N. longiflora Cav. Dump, Granite Ave., Dorchester (*N. T. Kidder*, Oct. 7, 1919). Specimen in herb. N. T. Kidder.

N. rustica L. One plant near dump (*M. L. Fernald & B. Long*, Aug. 28, 1913). Specimen in herb. N. E. Botanical Club.

PETUNIA.

P. axillaris (Lam.) BSP. Occasional in waste land and vacant lots. Originally a native of Argentina.

P. violacea Lindl. Vacant lots and waste land, rare.

PHYSALIS.

All the specimens reported in Dame & Collins, Fl. Middlesex Co., 1888, are here included, though most of the names have been superseded.

P. angulata L. Dump, Cambridge (*M. L. Fernald*, Sept. 26, 1908). Specimen in herb. Gray.

P. heterophylla Nees. Dry fields, frequent.

P. heterophylla Nees., var ***ambigua*** (Gray) Rydb. Meadow and waste land, Sherborn (*Miss M. L. Loomis*, June 19, 1911 et seq.). Probably elsewhere.

P. ixocarpa Brotero. Rubbish heap, Cambridge (*W. Deane*, Sept. 24–25, 1884). Specimen in herb. W. Deane.

P. longifolia Nutt. Waste place, Woburn (*F. W. Grigg*, Sept. 6, 1919, Oct. 11, 1921).

P. pruinosa L. Waste places, doubtfully native; Lowell, Lynn, Revere, Cambridge, Boston, Braintree.

P. subglabrata Mackenzie & Bush. Moist soil, Charlestown (*C. E. Perkins*, Sept. 6, 1911); Medford (*C. H. Knowlton*, Oct. 3, 1903); Newton (*F. W. Grigg*, Aug. 13, 1895).

P. virginiana Mill. Woolen mills, Westford (*Mrs. J. P. Riese*, May 30, 1918). Specimen in herb. Gray.

SOLANUM.

S. CAROLINENSE L. Waste places, rare (12 stations).

S. CITRULLIFOLIUM A. Br. Old brickyard, Cambridge, many plants (*M. L. Fernald*, Sept. 26, 1908); dump (*M. L. Fernald & B. Long*, Aug. 28, 1913). Specimens in herb. Gray and N. E. Botanical Club.

S. DULCAMARA L. Swamps, brooks and waste places, common throughout.

S. DULCAMARA L., var. *VILLOSISSIMUM* Desv. See *RHODORA* xxiv, 202, 1922. Rare, at Groveland, Burlington and Cambridge. In Europe this variety grows in drier places than *S. Dulcamara*.

S. nigrum L. Rich soil, also in gravel on sea-beaches; frequent throughout.

S. nigrum L., var. *DILLENII* Gray. Dump, W. Cambridge (*M. L. Fernald*, Sept. 26, 1908; *M. L. Fernald & B. Long*, Aug. 28, 1913). Specimens in herb. Gray and N. E. Botanical Club. Native from Florida to S. America.

S. PSEUDO-CAPSICUM L. Dump, Garden St., Cambridge (*F. W. Grigg & R. A. Ware*, Oct. 11, 1919); Fenway, Boston (*A. S. Pease*, Oct. 16, 1906). A tropical species, introduced by florists.

S. ROSTRATUM Dunal. Gardens and waste places, occasional.

S. SISYMBRIIFOLIUM Lam. Rubbish heap, Cambridge (*W. Deane*, Oct. 5, 7, 1884, Sept. 15, 1885; *M. L. Fernald & B. Long*, Aug. 28, 1913).

S. TUBEROSUM L. Waste places, occasional, but hardly a part of the flora.

SCROPHULARIACEAE.

AGALINIS (Purple Gerardia).

See *F. W. Pennell*, article in *Torreyia* xix. 205-216, 1919. The plants of this genus are at least in part parasitic on herbs.

A. acuta Pennell. (*Gerardia parvifolia* of Gray's Manual, 7th ed.). Dry sandy soil, Natick (*F. F. Forbes*, Sept. 17, 1905; Aug. 27, 1908). Specimen in herb. Gray.

A. maritima (Raf.) Raf. Salt marshes, common from Salisbury to Duxbury.

A. paupercula (Gray) Britton. Swamps and meadows, sometimes on brackish marshes, common throughout.

A. purpurea (L.) Pennell. Moist soil, Chelsea, Winthrop, Needham, Newton; probably more frequent in southern towns, but not reported.

A. tenuifolia (Vahl.) Raf. Sandy soil; apparently common, but no reports from southern towns.

ANTIRRHINUM.

A. MAJUS L. Dump on steep river bank, Newburyport (*D. White*, Sept. 13, 1913); waste place near salt marsh, Nahant (*F. W. Grigg*, Aug. 26, 1911). Native of the Mediterranean region.

AUREOLARIA. (Yellow Gerardia).

See *F. W. Pennell*, article in *Torreyia* xix. 205-16. 1919.

These plants are at least partly parasitic on roots of oaks and other hardwood trees.

A. flava (L.) Farwell. (*Gerardia virginica* of Gray's Manual, of 7th ed.). Dry open woods; apparently well distributed.

A. pedicularia (L.) Raf. Dry sandy clearings and borders of woods, common.

A. virginica (L.) Pennell. (*Gerardia flava* of Gray's Manual, 7th ed.). Rich open woods; not reported from southeastern towns, but frequent elsewhere.

CASTILLEJA.

C. coccinea (L.) Spreng. Meadows and swamps, rare; from Boxford, Andover, Dracut and Dunstable south to Franklin, but not known on the coast nor in Plymouth Co. Yellow form even more rare.

CHELONE.

C. glabra L. Swamps and low ground around brooks; common throughout.

DIGITALIS.

D. LANATA Ehrh. Waste heap, Rowley (*Miss H. R. Towne*, July 20, 1918; *J. D. Sornborger*, 1918). Specimens in herb. Gray and Peabody Acad. Sci. Native in the Danube region and in Greece.

D. PURPUREA L. Escape in open woods near leaf-dump, W. Manchester (*F. T. Hubbard*, June 23, 1913). Specimen in herb. N. E. Botanical Club.

GRATIOLA.

G. aurea Muhl. Wet sandy shores of fresh water, common throughout. White form occasional.

G. neglecta Torr. (*G. virginiana* of Gray's Manual). See RHODORA xx. 65, 1918. Moist rich soil; occasional in Essex, Middlesex and Norfolk counties.

ILYSANTHES.

I. inaequalis (Walt.) Pennell. (*I. anagallidea* (Michx.) Raf.) See Pennell (Torreya, xxii. 83, 1922). Wet sandy and gravelly shores of ponds; frequent, but no reports from southern towns.

I. dubia (L.) Barnhart. Wet places, often on shores; frequent, but no reports from Plymouth Co. (in our area).

LIMOSELLA.

L. subulata Ives. (*L. aquatica* L., var. *tenuifolia* of Gray's Manual). See RHODORA xx. 160-164, 1918. Above Chain Bridge, Newburyport (*E. Moulton*, Aug. 22, 1886); salt-marsh mud flats of Ipswich River, Ipswich (*J. H. Sears*, July 23, 1886). Specimens in herb. Peabody Acad. Sci. and Gray.

LINARIA.

L. canadensis (L.) Dumont. Dry sandy soil, sometimes in moister places; common throughout.

L. CYMBALARIA (L.) Mill. Dump, Lowell (*C. W. Swan*, Aug. 4, 1884); waste heap, Malden (*F. S. Collins*, June 26, 1886); Sherborn (*Miss M. L. Loomis* Dec. 3, 1912); Milton, weed about greenhouse (*N. T. Kidder*, June 28, 1921).

L. ELATINE (L.) Mill. "In siccis apricis argillaceis ad Ipswich" (*Wm. Oakes*, no date); weed in garden among grass, Cambridge (ex. herb. *H. G. Jesup*, August, 1877).

L. GENISTAEFOLIA (L.) Mill. Fields and roadsides, well naturalized at Groton (*C. H. Knowlton*, Sept. 1905 to date). Introduced from Europe.

L. REPENS Mill. About six plants escaped on Mill St., Waverley [Belmont] (*W. Deane*, June 24, 1900). Native of Europe.

L. SUPINA Desf. Medford (*Wm. Boott*, July 10, 1863). Specimen in herb. Gray.

L. VULGARIS Hill. Roadsides, fields and waste places; very common throughout.

L. MINOR (L.) Desf. Cambridge gravel pathway in Botanic Garden (*F. W. Hunnewell*, Sept. 12, 1914). Specimen in herb. *F. W. Hunnewell*.

MELAMPYRUM.

M. lineare Lam. Dry open woods, common.

MIMULUS.

M. brevipes Benth. Sown by wool refuse, N. Chelmsford (*W. P. Alcott*, June 21, 1879). Specimen in herb. Peabody Acad. Sci.

M. moschatus Dougl. Cold brook, Lexington (*F. S. Piper*, Aug. 11, 1912). Specimen in herb. Gray.

M. ringens L. Meadows, swamps and wet shores; common throughout.

ORTHOCARPUS.

O. purpurascens Benth. Woolwaste, N. Chelmsford (*W. P. Alcott* June 24, 1879). Specimen in herb. Peabody Acad. Sci. An annual from the coastal region of California.

PEDICULARIS.

P. canadensis L. Fields, meadows and open woods; common throughout.

P. lanceolata Michx. "Revere, just over the line" (. . . . *Moody*, no date). Specimen in herb. N. E. Botanical Club.

PENTSTEMON.

P. hirsutus (L.) Willd. Dry soil, rare; ten scattered stations.

P. laevigatus Ait. A rare introduction found at Haverhill, Groveland, Marblehead and Needham.

P. laevigatus Ait., var. **DIGITALIS** (Sweet) Gray. Fields, introduced in grass seed, rare; Rowley, Haverhill, Groveland, Hamilton, Andover, Lexington.

RHINANTHUS.

R. Crista-galli L. Rockport (*J. H. Sears*, June 30, 1885; *F. F. Forbes*, July 3, 1904); Stony Brook Reservation, old house site, W. Roxbury (*N. T. Kidder*, June 24, 1920).

R. Crista-galli L., var. **fallax** (Wimm. & Grab.) Druce. See RHODORA xii. 143, 1910. Near scashore. Rockport (*F. F. Forbes*, July 5, 1903). Specimen in herb. Gray.

SCHWALBEA.

S. americana L. Center St. near water tower, S. Weymouth (*E. & C. E. Faxon*, Sept. 9, 1886, July 16, 1887). Specimens in herb. Gray.

SCROPHULARIA.

S. lanceolata Pursh. (*S. leporella* Bicknell). See Pennell (*Torrey*, xxii. 84, 1922). Moist soil, often in shade; occasional.

S. marilandica L. Rich open woods; rare, Sangus, Lynn, Lexington, Revere, Concord, Boston: Roxbury (*John A. Lowell*, 1846).

S. NODOSA L. Thicket, Cambridge (*M. L. Fernald*, Sept. 1, 1892, the colony spreading and now of considerable extent); about a dump, Cambridge (*M. L. Fernald & B. Long*, Aug. 28, 1913). Specimens in herbs. Gray and N. E. Botanical Club. Naturalized from Europe.

VERBASCUM.

V. BLATTARIA L. Pastures and waste places, rare (11 stations).

V. LYCHNITIS L. Westford (*W. E. Coburn*, 1887). Specimen in herb. N. E. Botanical Club.

V. PHLOMOIDES L. Introduced in woolwaste at Gloucester, Westford, Medford, Weston and Plainville.

V. NIGRUM L. Tapleyville, Danvers (*J. H. Sears*, Aug. 8, 1879). Adventive from Europe, probably in wool. Specimen in herb. Peabody Acad. Sci.

V. THAPSUS L. Pastures and dry soil; very common throughout.

VERONICA.

For nomenclatorial changes and descriptions of new species and varieties in this genus see articles by F. W. Pennell in *RHODORA* xxiii. 1-22, 29-41.

V. AGRESTIS L. College campus, Wellesley (*K. M. Wiegand*, March 22, 1913); Roxbury (*John A. Lowell*, May 7, 1846); specimens in herb. Wellesley College, and Bost. Soc. Nat. Hist. Reported also from Reading and Framingham in *Dame & Collins*, Fl. Middlesex Co. 69, 1888.

V. americana Schwein. Cold wet places, rare: Westford, Danvers, Peabody, Brookline.

V. ARVENSIS L. Dry soil, frequent.

V. CHAMAEDRYS L. Waste places and vacant lots, rare: Andover, Newburyport, Gloucester, Cambridge, S. Boston, Braintree, Wellesley.

V. glandifera Pennell. (*V. Anagallis-aquatica*, in part, of Gray's Manual.) Ipswich (*Wm. Oakes*, no date). Specimens in herbs. Gray and Boston Society of Natural History.

V. LATIFOLIA L. (*V. Teucrium* of Gray's Manual, 7th ed.) Roadside escape, Chelmsford (*C. H. Knowlton*, June 14, 1902); Sharon (*S. F. Poole*, June 1905).

V. LONGIFOLIA L. (*V. maritima* L.) Roadsides and waste land, rare (nine stations).

V. officinalis L. Dry open woods; rather common elsewhere, but apparently rare in Essex and Plymouth Counties.

V. PEREGRINA L. Weed in moist places; frequent except in southern towns.

V. PEREGRINA L., var. **XALAPENSIS** (H.B.K.) Pennell. In similar situations, about as frequent as the species.

V. PERSICA Poir. (*V. Tournefortii* C. C. Gmelin.) Newburyport (*E. Moulton*, 1886); Georgetown (*Mrs. C. N. S. Horner*, 1886); weed in Prof. D. L. Sharp's garden, Hingham (*C. H. Knowlton*, May 14, 1916).

V. scutellata L. Wet places, common.

V. serpyllifolia L. Fields, lawns and gardens; common throughout.

[*V. spicata* L. Reported from roadside, N. Chelmsford (*C. W. Swan*) in Dame & Collins, Fl. Middlesex Co. 69, 1888, but specimen is not available for examination.]

C. H. KNOWLTON } Committee on
WALTER DEANE } Local Flora.

SALIX SERISSIMA ON LONG'S PEAK.—Mr. Carleton R. Ball, *Botanical Gazette*, lxxii. 221 (1921), in speaking of the distribution of *Salix serissima* (Bailey) Fernald says that recent collections have extended its known range "southwestward to Pembina and Rolette Counties in North Dakota and to Flathead County, Montana" and that "It is quite possible that further search will extend the range both north and south in the Rocky Mountains."

In 1913, while collecting on Long's Peak, Colorado, I found a willow which I took to be this species, growing in an alpine meadow at an altitude of about 9,000 feet. Professor Fernald, to whom I have recently shown my specimen, has confirmed my identification.